

Innovative CTE Curriculum Grant – Round 1 Awardees

- **Elkhart Area Career Center (Region 2)**
 - Grant funding: \$124,500
 - Private match: \$42,500
 - Sector(s): Health Care
 - Partners : 7 school districts, Elkhart Area Career Center (grantee), Ivy Tech, IU Health Systems, Beacon Health Systems, Lycro Products Company, Morrison Industrial Equipment, Overhead Door, Horizon Education Alliance, Region 2 WIB, Business Education Roundtable, College and Career Success Coalition
 - Includes the Early College Model (Horizon). Students who choose to enroll will participate in work-based learning through Career Pathways in Health Care. These students will graduate with stackable and portable credentials, as many as 30 transcriptable college credits, a minimum of two health-related industry certifications, worksite experience, employer mentor relationships, and ambitious yet attainable plans for future study and career advancement. Industry partners/employers will be involved in creating the plan for the experiential learning component of the program, which will include a College and Career Exploration Seminar, mentoring, job shadowing, and a summer internship. Grant funds will be used to hire career advisors, who will work with industry partners as well as participating schools and Ivy Tech Community College.
- **Fairfield Junior-Senior High School (Region 2)**
 - Grant funding: \$13,667
 - Private match: \$6,891
 - Sector(s): Advanced Manufacturing
 - Partners: Fairfield High School (grantee), Wawasee Area Career and Technical Cooperative, Ivy Tech, Goshen Die Cutting (GDC), New Horizons Aviation, Conexus
 - Utilizes HIRE Technology Curriculum. Students will tour GDC facilities, job shadow, and intern with GDC, and speakers from GDC will be invited into the Conexus classes to talk with students about current trends and careers in in AML. Courses will also help students with writing resumes and improve their interviewing skills. Students will take exploratory technology and career courses in 7th and 8th grades to begin building a foundation for the manufacturing and logistics pathway. The instructor for the proposed curriculum will be trained through a Conexus summer institute and will be considered a member of Ivy Tech's adjunct faculty.
- **South Bend Community School Corporation (Region 2)**
 - Grant funding: \$39,819
 - Private match: \$13,370
 - Sector(s): Automation and Robotics (Mechatronics)
 - Partners: South Bend Community School Corp (grantee), Ivy Tech, Koontz-Wagner, General Sheet Metal, Federal Mogul, St. Joe County Chamber of Commerce, WorkOne
 - Curriculum will be aligned directly with the Mechatronics program at Ivy Tech with a focus on automation and robotics. Provides students with the opportunity to study for three years at the high school level, earn 34 dual credits in both academic and technical subjects, complete a Technical Certificate from Ivy Tech upon receiving their high school diploma and participate in work-based learning during both their junior

and senior years in high schools. This grant would be used to fund equipment for the Mechatronics program, professional development for the teacher, support for additional academic programs needed to earn the Technical Certificate, and a work-based learning coordinator for this and all other CTE programs. Cycle 1 of this grant will cover expenses for curriculum development, laboratory planning, professional development, offering academic opportunities needed in the Technical Certificate requirements for Ivy Tech Community College, and for marketing of the new automation and robotics pathway. Also the organization and beginning implementation of the work-based learning opportunities will be started. To fully implement the new advanced manufacturing pathway, Cycle 2 funding must be secured. All students will participate in field trips, all will participate in job shadows and in the third year of the program, all students will participate in either job shadowing experiences or internships depending on age requirements. In addition, mentors will be assigned to all enrolled students to provide guidance and networking experiences.

- **Warsaw Area Career Center (Region 2)**

- Grant funding: \$350,000
- Private match: \$160,035
- Sector(s): Welding and Machining
- Partners: Warsaw Area Career Center, Ivy Tech, OrthoWorx, various biomedical companies, WorkOne
- The curriculum will be based on a combination of models utilizing classroom instruction, extensive hands-on laboratory project time and work-based learning. Students will use three different welding processes to obtain AWS certifications and will have advanced training in the first year of the program on all three processes. Precision Machining Technology (PMT) students will achieve NIMS certification by implementing learned skills in the disciplines of shop safety, project layout, precision measurement, manual lathe, manual mill, CNC Programming, and CNC machine setup and operation. These skills will be proven with NIMS standard projects and rated by the Metrology Technician Committee. Students will then continue to the NIMS online certification testing process for complete certification in the related disciplines. Once completed, the student will move into either the work based learning pathway or continue at the career center in an advanced student learning role. Students will utilize the new project design lab and project launch center within the Precision Welding Technologies and PMT labs. The advanced learning role will offer real-world project scenarios where students will design and manufacture a project.

- **Kokomo School Corporation (Region 4)**

- Grant funding: \$75,338
- Private match: \$76,000
- Sector(s): Entrepreneurship (CEO Program)
- Partners: 10 school corporations, Kokomo Area Career Center (KACC), Ivy Tech Kokomo, IU Kokomo, PU Kokomo, Andymark, Delphi, Duke Energy, GM, Liberty Financial, St. Joseph Hospital, Merrell Bros., Coca-Cola Bottling, (and many others), Greater Kokomo Economic Development Alliance (Inventrek)
- The CEO Program will enable students to become self-reliant, enterprising individuals that will become entrepreneurs or entrepreneurial thinkers while also contributing to the future economic development of the Greater Kokomo region. Participants will gain exposure to learning basic work skills and soft skills. The program will be one year, four credit classes at KACC. All classes occur on-site with regional businesses. The location for instruction will change between business partners every nine weeks. Guidance for the class is built around the National Entrepreneurship Standards. Students will collaborate as a class to develop a business plan for a company and will work with a business leader mentor to develop their own individual business plan. The class will count as an elective for all three of the Core 40 diplomas.

- **Tecumseh Area Partnership (Region 4)**
 - Grant funding: \$174,292
 - Private match: \$87,680
 - Sector(s): Advanced Manufacturing
 - Partners : 7 School Corporations, West Central and Wildcat Creek Career and Technical Cooperatives, Ivy tech, SIA, Caterpillar, Wabash National, Kirby Risk, Nucor Steel, Conexus, Frankfort/Clinton County Chamber of Commerce, WorkOne, Tecumseh Area Partnership (TAP)
 - Incorporates the two year HIRE Technology Curriculum with an additional year for instruction in adv. mfg. Includes opportunities for internships and the development of two business liaison positions. Liaisons will work with schools and manufacturers to establish working partnerships, secure a mfg. Champion and A+ partner for each participating school, make students and parents aware of mfg. career opportunities, work with school counselors to promote and enroll students in the mfg. pathway, secure job shadowing opportunities for students, and develop beneficial WBL experience for students.

- **Conexus (CICP) (Region 4 and 5)**
 - Grant funding: \$289,050
 - Private match: \$121,040
 - Sector(s): Advanced Manufacturing and Logistics (AML)
 - Partners: Many schools partner with Conexus, Chrysler, Cummins, Allison Transmission, Region 4 WIB, Conexus (grantee)
 - Focuses on summer internships for students with major industries, including Cummins, Chrysler, and Allison Transmission. Utilizes the infrastructure of HIRE Technology, A+ Partners, and Dream It Do It Indiana. Includes the creation of a cohort program based on industry models, which may help create a sense of AML community among participants. This concept is transferable to additional industry clusters.

- **Anderson Community School Corporation (Region 5)**
 - Grant funding: \$292,320
 - Private match: \$79,700
 - Sector(s): Manufacturing and Logistics
 - Partners : Anderson High School (grantee), Ivy Tech, Purdue-Anderson, Greenville Technology Inc., XADS, Carter Logistics, Keihin, Mancor, Park Avenue Solutions, City of Anderson, Madison County Education Coalition, NAACP, WorkOne
 - During the piloting process, the instructor for the manufacturing program will be consulting with Conexus, manufacturing partners which were set up through Conexus, participating manufacturers in the Economic Development Manufacturing Roundtable, and all contributing participants on the Manufacturing Advisory Board. Since the HIRE Technology curriculum is a two-year program, Anderson will utilize that curriculum for year one in the Intro to Advanced Manufacturing and Logistics followed by year two with the Advanced Manufacturing I course. In the first full implementation year of HIRE Technology, the instructor will be utilizing the HIRE Technology computer software-based curriculum. This program will supplement each HIRE technology e-learning module with a project reinforcing the skills taught within the module. Students entering the Advanced Manufacturing II course will complete a curriculum focused on the application of the two-year Conexus HIRE Technology curriculum solely through PBL. To prepare for the 15-16 school year, a workplace learning coordinator will make workplace connections to set up additional Internship partners and aide those partners in creating the implementation of the internship.

- **Central 9 Career Center (Region 5)**
 - Grant funding: \$126,900
 - Private match: \$42,300
 - Sector(s): Manufacturing (may replicate curriculum for Construction)
 - Partners: 8 school corps (feeder schools, Central Nine Career Center (grantee), Vincennes University, Caterpillar Remanufacturing, Endress+Hauser, Major Tool & Machine, Westport Homes, Johnson County Development Corporation, Aspire Johnson County)
 - Expanding Dream It Do It and adding an Industrial Repair and Maintenance course. All students enrolled in Central Nine Advanced Manufacturing (Conexus HIRE Technology), Electronics, Precision Machining, and Welding will also be enrolled in one credit of Industrial Repair and Maintenance. Students will be primarily enrolled in their program of choice, but would rotate as a whole class for one-week sessions through each of the other manufacturing programs once a semester. Offers PBL training and cross visits with industry for teachers. The addition of a business/educational liaison position will provide a way to continue to strengthen relationships and connect resources. This person will be the central contact/hub for the CTE Region, and would work with both business and educational representatives in connecting resources for presentations, tours, field trips, job shadows, internships, etc. This position of VU Recruitment Partner will serve C9 and all of its sending schools. The VU Recruitment Partner will work with high school students to utilize career assessment and interest inventories data to identify VU prospective students, increase awareness of Vincennes University and its programs/majors, and promote specifically CTE Pathways to targeted programs/majors.

- **Goodwill Education Initiatives, Inc. (Region 5)**
 - Grant funding: \$314,993
 - Private match: \$151,800
 - Sector(s): Health, Manufacturing, and Logistics
 - Partners: Indianapolis Metropolitan High School (IMET), The Excel Center, Ivy Tech, Vincennes University, Eskenazi Health, IU Health, St. Vincent's Health System, Applied Composites, Wood-Mizer, Global Plastics, UPS, TalentSource, Nurse-Family Partnership
 - Focuses on both adult and high school students. Uses HIRE Tech curriculum. Taught at IMET and Excel Center.

- **Jay School Corporation (Region 6)**
 - Grant funding: \$153,776
 - Private match: \$61,514
 - Sector(s): Advanced Manufacturing
 - Partners: Jay School Corp (grantee), Blackford Schools, Area 18 CTE District, Vincennes University, Tyson, FCC, Fort Recovery Industries, Sunoco, John Jay Center for Learning, CELL, Conexus
 - Proposes to innovate the implementation of the Conexus/HIRE Technology curriculum by embedding it in a Project-based - Early Credentialing high school model that synthesizes the roles and resources of secondary, post-secondary, adult workforce development, and local manufacturers in five ways: 1) provide students the opportunity to earn an Ivy Tech Technical Credential in Advanced Manufacturing and Mechatronics prior to graduating high school. 2) Develop curriculum that connects competitive high school robotics to existing Ivy Tech MRPO Advanced Manufacturing courses offered in Indiana high schools. 3) Develop curriculum to evaluate and report Soft Skill attainment for high school students in each CTE pathway that includes creativity and innovation, critical thinking and problem solving, teamwork, time management and work ethic. 4) Create work-based experience curriculum and "on-the-factory-floor" instructional

opportunities for students, teachers and counselors. 5) Integrate our innovative CTE curriculum fully with the John Jay Center in order to provide integrated services that are student and adult centric.

- **Area 30 Career Center (Region 7)**

- Grant funding: \$82,505
- Private match: \$55,000
- Sector(s): WIRED (Welding, Innovation, Robotics, Engineering, and Design)
- Partners: 5 high schools and Area 30 Career Center (grantee), Rose Hulman, Vincennes University, Ivy Tech, Heartland Automotive, Crown Equipment Corp., Nucor Steel, Tomlinson Mfg. Group, DEPCO, Liberty Industries Inc., JBH Technologies, Putnam County Community Foundation, Greencastle/Putnam County Economic Development Center
- WIRED curriculum will specifically address the needs of the advanced manufacturing industry in the region by introducing students in the first year course to a wide spectrum of related skills including welding, industrial maintenance, programmable logic controllers (PLCs), design, computer numerical control (CNC) machines, robotics and more. In the second year, students will focus on one specific career area to continue building their knowledge, skills and experience. Business partners will provide internship opportunities.

- **Parke-Vermillion Education and Training Interlocal (PVETI) (Region 7)**

- Grant funding: \$89,710
- Private match: \$62,600
- Sector(s): Energy Production, Systems, and Delivery
- Partners: 5 high schools, PVETI (grantee), Ivy Tech, Ceres Solutions, Nucor Steel, Duke Energy, Vermillion Rise Mega Park
- Focus is on the energy sector and incorporates flipped-classroom instruction. Incorporates workplace preparedness. Standards and curriculum will be developed for an introductory course for energy, Energy I, and an Energy II course. The curriculum development team will also work to create "pre-certifications" that indicate to employers that students have completed the initial steps and requirements to continue on to certification.

- **Columbus Area Career Connection (C4) (Region 9)**

- Grant funding: \$204,805
- Private match: \$70,000
- Sector(s): Maintenance Technician
- Partners: Multiple high schools (feeder schools for C4), Ivy Tech Columbus, Purdue Columbus, Enkei America, Honda, Cummins Inc., NTN Driveshaft Inc., Caltherm, EcO15, SIPS
- New courses will be designed to model a polytechnic institute. Curriculum consists of a 2-3 year course of study. The 2-year (720 hour) curriculum for Maintenance Technician courses will guide students through the skills described as necessary by the GAP Analysis process, including: safety, robotics, hydraulics, pneumatics, basic and preventive machining, instrumentation, basic micro processes, blueprint reading, welding, HVAC, rigging, CNC programmable controllers, and gauge reading. Students may specialize in Electronics or Machining. WBL options in senior year.

- **Prosser Career Education Center (Region 10)**

- Grant funding: \$294,693
- Private match: \$128,000
- Sector(s): Advanced Manufacturing and Advanced Machine Tool

- Partners: 21 high schools, Prosser Career Center (grantee), Ivy Tech, Vincennes University, Amatrol, ACI Tool Sales
 - Develops and implements a project-based Advanced Manufacturing curriculum that places a heavy focus on Industrial Maintenance by blending traditional training equipment with interactive multimedia and virtual simulator software. Internships will be required. This grant proposal is submitted, in part, to finalize the transformation of this traditional Electricity program into a 21st century Advanced Manufacturing program that addresses the needs of Region 10.
- **Perry Central Community School Corporation (Region 11)**
 - Grant funding: \$76,101
 - Private match: \$37,000
 - Sector(s): Advanced Manufacturing
 - Partners: Perry Central and Tell City High Schools, Ivy Tech, Vincennes University Jasper Campus, Perry County College, Waupaca Foundry, Inc., Conexus, ATTC (an A+ partner through Conexus), Perry County Development Corporation
 - Development of a new curriculum in advanced manufacturing, building upon HIRE Technology and PLTW. Will develop an applied math course encompassing content taught in Ivy Tech's Math 122 and VU-J's Math 103. Also, will develop a CTE Pilot course using evidence-based pedagogical models such as PBL. In this course, each student will complete a self-selected project in which they innovate and develop prototypes using equipment in a digital lab.
- **Vincennes University Jasper Campus (Region 11)**
 - Grant funding: \$250,265
 - Private match: \$116,000
 - Sector(s): Advanced Manufacturing
 - Partners: 4 high schools, Southern Indiana Education Service Center, Vincennes University Jasper Campus (grantee), Jasper Engines, Kimball Electronics, Toyota, Indiana Furniture Industries, OFS Brands, Master Brand Cabinets, Jasper Rubber, Wabash Valley Produce, Region 11 WIB, I69 BrainPower Group, Dubois Strong, Purdue TAP
 - Has broad employer partnerships. Supplements and builds off of four existing programs. New model centered on trusted improvement methodologies (TPS, Lean Six Sigma). Secondary academic and technology teachers will work with post-secondary faculty and trainers from area DOJOs to develop and integrate curriculum targeting the skills gap areas of technical math, programming, mechatronics, technical communications, and soft skills. The Conexus HIRE curriculum grid, merged with the CAP and Toyota curriculum will allow VU to develop the appropriate skills and standards recommended by industry. Over 50 students will enroll in I.C.E. and internships, 100 in PLTW programs, and 50 in related mfg. programs. Specific marketing efforts will aim at counselors and parents.

Innovative CTE Curriculum Grant – Round 2 Awardees

- **Newton County Schools (Region 1)**
 - Grant Funds Allocated: \$339,571
 - Private Matching Funds: \$135,050
 - Sector: Agriculture
 - Key Partners: Fair Oaks Farms, Peterson's Ag Service, Monsanto, Newton County Surveyor's Office, Ivy Tech, local farmers
 - Start Date: Fall 2015
 - Highlights:
 - New curriculum includes three sections:
 1. Precision Farming: Merges intro and advanced agriculture courses with STEM-focused PLTW courses
 2. Agritourism: Organic food and the farm-to-table concept
 3. Aquaponics: Including science, business, and marketing components
 - Will provide hands-on lab experiences for students in using GPS guided tractors, automated fertilizer dispensers that adjust for varying field types, and remote-guided drones for geospatial mapping
 - All proposed dual credit courses are or will be aligned to Ivy Tech's dual credit crosswalk. Juniors and seniors in each concentration will participate in multiple work-based learning experiences with seniors completing an intensive "capstone" experiential course aligned to the IDOE new Work Based Learning course titles
- **Pulaski County Community Foundation (Region 1)**
 - Grant Funds Allocated: \$82,354
 - Private Matching Funds: \$28,195
 - Sector: Manufacturing
 - Key Partners: Pulaski County Community Foundation, Pulaski County Economic Development Commission, Braun Corporation, Ivy Tech
 - Start Date: Fall 2015
 - Highlights:
 - The recently formed Pulaski County Manufacturing Coalition will lead the proposed innovative curriculum, called RAM-Tech, through integration and alignment to business needs, state-approved standards, and Amatrol curriculum
 - The RAM-Tech pipeline program will introduce Industrial Repair and Maintenance curriculum
 - This curriculum "makes the industrial maintenance instruction model inherently innovative within a traditional academic high school setting"
 - Will offer a Workforce Investment Act- and INtraining-approved, Certified Production Technician training program to help engage populations beyond traditional students
- **Michigan City (Region 1)**
 - Grant Funds Allocated: \$223,809
 - Private Matching Funds: \$141,785
 - Sector: Energy

- Key Partners: NIPSCO, International Brotherhood of Electrical Workers (IBEW), ArcelorMittal, Ivy Tech, Purdue North Central
- Start Date: Fall 2015
- Highlights:
 - Includes Summer Energy Camps for students in grades 1 through 12 to provide awareness and engagement opportunities
 - Creates a new two-credit, two-semester introductory energy course for 10th grade titled Energy Industry Fundamentals
 - Creates new, intensive, six-credit full year courses titled Energy I and Energy II for 11th and 12th grade respectively where each student will be paired one-to-one with an industry mentor
 - Incorporates a summer internship program sponsored by IBEW
 - Dual credits earned in the Academy transfer directly to Purdue North Central's four-year Bachelor's Degree programs in Energy, Electrical, or Mechanical Engineering
- **Heartland Career Center (Region 3)**
 - Grant Funds Allocated: \$134,886
 - Private Matching Funds: \$180,325
 - Sector: Advanced Manufacturing
 - Key Partners: Ford Meter Box, Wabash MPI/Carver, Kellam Inc., Global Precision Parts, Ivy Tech, Wabash Chamber, Miami County Economic Development Commission
 - Start Date: Fall 2015
 - Highlights:
 - Creates the Collaborative Advanced Manufacturing Opportunities (CAMO) pathway
 - HIRE curriculum combined with Ivy Tech Kokomo's ITEP curriculum will create the Adv Mfg I and II course curricula
 - Members of the Manufacturing Alliance will serve on the new curriculum planning team to ensure alignment with regional industry needs
 - Includes components of Indiana's Work Ethic Certificate with "soft skills" standards and lessons combined with the WIN software and WorkKeys programs
 - Conversations with CELL have begun to explore the possibility of Heartland Career Center using an Early College High School model with the CAMO initiative
- **Noblesville (Region 5)**
 - Grant Funds Allocated: \$142,000
 - Private Matching Funds: \$736,150
 - Sectors: Manufacturing, Automotive, and Construction
 - Key Partners: Gaylor Electric Inc., Hare Chevrolet, ABC, SMC, Lincoln Tech, Ivy Tech
 - Start Date: Fall 2015
 - Highlights:
 - Proposing a new curriculum titled the MAC Initiative comprised of three separate areas of focus:
 1. Manufacturing: collaborating with SMC to develop a new course curriculum, expanding on the HIRE curriculum where students will learn hands-on application of in-demand skills
 2. Automotive: collaboration between Hare Chevrolet and Lincoln College of Technology to create a new curriculum and lab space for students to begin their training as an Automotive Technician, Collision Repair Technician, or Diesel Technician
 - a. Student will learn the skills and knowledge required to pursue an ASE certification

- 3. Construction: will expand the courses offered in partnership with ABC to include welding due to the current industry demand and will help remove barriers for students to pursue a level-one apprenticeship status and get placed in an internship opportunity
 - Creates a full-time job coach position for the first year of the MAC initiative to serve as the liaison across all three initiatives
- **New Castle Community Schools (Region 6)**
 - Grant Funds Allocated: \$49,982
 - Private Matching Funds: \$48,380
 - Sector: Precision Machining
 - Key Partners: 7 regional manufacturing businesses (not named), Ivy Tech
 - Start Date: Fall 2015 (currently in place but will expand with this grant)
 - Highlights:
 - Curriculum will be developed for IDOE courses Precision Machine Trades 1 & II, each involving 1080 hours of instruction
 - Six week Capstone Internship opportunities will be available during the Summer to students entering the 2nd year of the program
 - Ivy Tech provides assistance for students enrolled in My Foundations, providing instruction for students not meeting academic levels on AccuPlacer necessary for upper level classes
 - Utilizes Tooling U software to create a competency based model of instruction
- **Vigo County School Corporation (Region 7)**
 - Grant Funds Allocated: \$303,125
 - Private Matching Funds: \$243,253
 - Sector: AML (NEAT pathways, robotics pathway)
 - Key Partners: multiple schools, Ivy Tech, Yaskawa Motoman, Sony DADC, Duke Energy Foundation, Chamber Workforce Committee Terre Haute, WIB
 - Start date: Fall 2015
 - Highlights:
 - Builds on the New and Emerging Automation Technology (NEAT) pathway approved by IDOE
 - The industry partnership forged with Yaskawa Motoman North America will allow high school students to earn a DX100 certification with a cost of only \$25 each, reduced from the standard price of \$1,700 each
 - This curriculum addresses Industrial Robotics, but will also include standards for humanoid technology and drone robotics
- **Scott County School District (Region 10)**
 - Grant Funds Allocated: \$137,606
 - Private Matching Funds: \$62,652
 - Sector: Manufacturing and Welding
 - Key Partners: Amatrol, Mid-America Science Park, Ivy Tech, Mayor of Scottsburg, Prosser
 - Start Date: Fall 2015
 - Highlights:
 - This pilot program and certifications will strengthen and improve alignment of the Advanced Manufacturing and Welding pathways with the employment needs of regional companies
 - Conferred with several regional businesses that will accept students for both job shadowing and participation in externships